

BEACON HR/PAYROLL IMPLEMENTATION PROJECT DATA MIGRATION STRATEGY

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APPROVAL

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Data Migration Strategy

DELIVERABLE CONTENTS

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Data Migration Strategy

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1. EXECUTIVE SUMMARY

A key issue facing the BEACON initiative is the need to access historical human resources and payroll data currently residing in the legacy systems—Personnel Management Information System (PMIS), Central Payroll, and DOT Payroll—that will be replaced by the new BEACON system (SAP ERP and SAP BI NetWeaver 2004s). The current BEACON program scope in terms of historical data conversion is to load into SAP ERP only that data necessary to provide a seamless generation of W2 information for the calendar year in which the system goes live and to comply with State policy and procedures. There currently are no plans to convert and/or load historical or archived legacy data into SAP ERP or SAP BI. This BEACON Data Migration Strategy Deliverable seeks to resolve this issue, providing possible options and a recommendation on what historical data needs to be migrated, the format of the conversion, and the requisite data repositories needed to host the historical data.

Legacy data environments were examined to determine how much historical data is available for use. High-level historical data requirements were determined from BEACON documentation including the BEACON Reporting Requirements Document. Interviews were conducted with personnel from Fiscal Research, Office of State Personnel, Office of State Budget and Management, Office of State Auditor, BEACON Business Intelligence Team, and the BEACON Conversion Team. The future-state BEACON operational and security environment was taken into consideration. Four data migration strategy options with a discussion of the advantages, disadvantages, and impacts of each are presented:

- Option 1: Status quo
- Option 2: Copy all online data to repository but do not convert
- Option 3: Convert all online historical data to SAP BI
- Option 4: Copy all online data to a repository, convert to SAP BI selected historical data that has been identified as required for reporting, and maintain archived data in current format and media.

Option 4—Copy all online data to a repository, convert to SAP BI selected historical data that has been identified as required for reporting, and maintain archived data in current format and media—is recommended as the BEACON Data Migration Strategy.



2. GUIDING PRINCIPLES/ASSUMPTIONS

- The BEACON Reporting Strategy is approved and in place
- The Data Migration Strategy should complement the BEACON Reporting Strategy
- Any historical data will be loaded into BI, not into or through SAP ERP
- Leading practice suggests that converting historical data into BI that is not being captured in the SAP ERP transaction processing system would not add value
- Initially, BI will contain only the data necessary to support the BEACON HR Payroll initiative
- The BEACON archiving strategy will be determined at a later date
- Archived data from the legacy systems must be accessible when these systems are retired.



3. LEGACY SYSTEMS AND DATA

There are three main legacy systems that were evaluated for this data migration strategy: PMIS, Central Payroll, and DOT Payroll.

PMIS is the primary HR system for the State of North Carolina. PMIS is a mainframe system consisting of an IMS application with data stored in an IMS database, a DB2 database, and sequential files on disk or tape. The current conversion scope of data from PMIS into SAP ERP is limited to a subset of data in the IMS and DB2 databases. Various agencies need to access PMIS history data after BEACON go-live for research and verification purposes. The current system allows instant access to employee history and position history. There is a need to make available employee history and position history in the BEACON system. There is also a need for combined reporting with data in the new BEACON system and data from the legacy PMIS.

Central Payroll is a mainframe system consisting of an IMS application with an IMS database. Every payroll run produces files that are stored on tape. This is primarily used for research purposes. The oldest file in storage is from 1999 (7 years). Continued access to these files will be necessary for research purposes.

DOT Payroll is a mainframe system consisting of a CICS application with files in VSAM format. Each payroll cycle produces files that are stored as VSAM files. The files are kept for 10 years. Continued access to these files will be necessary for research purposes.

While the tables, files, and databases in the subsequent sections were identified from the legacy systems for conversion design by the BEACON conversion team, there may be additional tables or records needed as the conversion design (including data mapping) is completed in the coming months. However, the information on the tables, files, and databases identified to date is useful in determining the scope of the data migration strategy.

3.1. PMIS Employee and Position Database (IMS)

The employee database in PMIS includes all active, retired, and separated employee data since 1976. The position database in PMIS includes abolished and active positions dating back to 1976. The Y2K data cleansing project was completed in December 1999. Currently, BEACON plans on converting and loading only active employee records into SAP ERP. The active employee records will be extracted from IMS and staged in a DB2 relational database before loading into SAP ERP. The main tables appear to be a little more than 5,059,449,449 bytes as of December 2006. The attributes for this data are outlined in the following table.

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File/Table	Rows	Columns	Size (bytes)	Years
EMPLOYEE (600)	430K	137	264,192,000	30
EMPLOYEE_ADDR (700)	281K	53	201,420,800	30
EMPLOYEE_DATE (150)	214	27	139,100	30
EMPLOYEE_INCR (50)	1405K	11	71,936,000	30
EMPLOYEE_PMP (400)	7624	41	3,049,600	30
EMPLOYEE_PROF (130)	324K	29	43,130,880	30
EMPLOYEE_WARN (125)	13386	15	1,673,250	30
POSITION (300)	410K	82	125,952,000	30
BUDGET (100)	436K	21	44,646,400	30
VACANCY (1200)	5373	20	6,447,600	30
PHISTORY (300)	10178K	98	3,126,681,600	30
PHISTBUD (150)	7001K	31	1,075,353,600	30
SCHEMATC (365)	18168	105	6,631,320	0
SCHEMATE (1457)	6290	13	9,164,530	0
SCHEMDOW (1457)	1584	12	2,307,888	0
SCHEMDPT (150)	50043	22	7,506,450	0
SCHEMHST (500)	115K	71	58,880,000	0
SCHEMKSA (1457)	1563	12	2,277,291	0
PMX_LV_BALANCE_TAB (152)	38820	31	5,900,640	6
PMX_AG_AGENCY_TAB (125)	17268	20	2,158,500	0
Total			5,059,449,449	



3.2. PMIS Forms History (IMS)

PMIS/HR has an IMS Forms History database where all forms (actions) against positions and employees are stored. This database contains 30 years of historical forms. This is the data that HR personnel access when they want to see the history of actions for a position or employee. The Forms History database appears to be taking up less than 3 GB of storage as outlined in the table below.

Segment	Length	Row Count	Size (bytes)
FMHISTRT	92	2,466,054	226,876,968
FHSEVENT	65	13,069,982	849,548,830
FHSFORM	176	3,811,710	670,860,960
FHSSERV	37	101,255	3,746,435
FHSBUDG	90	4,097,257	368,753,130
FHSTXTHD	57	3,123,766	178,054,662
FHSTXTLN	46	11,820,532	543,744,472
Total		38,490,556	2,841,585,457

3.3. Position and Employee Monthly Snapshots (Tape)

In PMIS/HR, "snapshots" are created on tape for position and employee data at the last day of the month. Initially these tapes were created twice a year, then quarterly, and currently on a monthly schedule.

Snapshot tape files inventory:

- June 1976
- June and December 1977, 1978, 1979, 1980, 1981, 1982, and 1983
- March, June, September, and December 1984 and 1985
- March, June, September, and December 1986 through 1993
- Month end plus July 1 beginning September 1993.

Naming convention of the files:

- Position File: OSP.PMX.PM471-1.mthdd-yy (583 MB current file/93 MB oldest file)
- Employee File: OSP.PMX.PM473-1.mthdd-yy (296 MB current file/46 MB oldest file).

Data from these snapshots are aggregated to a DB2 database that feeds a Java application called the PMIS Director's Center that is used for reporting.



3.4. DOT Payroll

DOT Payroll is a CICS application with files in VSAM format. The primary files are the master and report files, which are kept historically for 10 years and mainly for research purposes. The master file contains only active DOT personnel for the current year including all employee information necessary for processing payroll. At the beginning of each payroll year (January 1) all terminated employees are removed from the master file. Each payroll cycle generates a new copy of the master file. The report file is basically the all the information on the paychecks generated during the payroll cycle. Each payroll cycle generates a new report file. There are currently 109 master and report files for a total of 2,645 MB with a 10-year retention period. The file attributes are detailed below:

File name	Row Count	Column Count	Size (bytes)
MASTER	16,159	148	12,927,200
W-2	16,159	40	12,927,200
REPORT	13,716	187	12,344,400
BOND MASTER	186	42	74,400
BOND HISTORY	10,539	44	4,637,160
DIRECT DEPOSIT	14,048	7	1,151,936
COMMUTING VEHICLES	408	17	32,640
Total			44,094,936

Copies Created per Year	Possible Sources of Extra Files
26 Regular Payroll Masters	Incentive Payroll
26 Regular Payroll Reports	Moving Expenses
26 Supplemental Payroll Masters	Severance Pay
26 Supplemental Payroll Reports	
9 Premium Payroll Masters	
9 Premium Payroll Reports	
12 Imputed Payroll Masters	
12 Imputed Payroll Reports	
12 Disability Payroll Masters	
12 Disability Payroll Reports	
12 Law Allowance Payroll Masters	
12 Law Allowance Payroll Reports	
12 Hospital Medical Payroll Masters	
12 Hospital Medical Payroll Reports	

3.5. Central Payroll

Central Payroll maintains two primary data stores. The payroll master file is an IMS database. The primary segments/tables of this database are outlined in the following table.



File Name	Row Count	Column Count	Size (bytes)
PYR_BONDS (212)	1063	23	225,356
PYR_EMP_MASTER (80)	112K	96	9,175,040
PYR_MISC_DEDT (49)	318K	6	15,955,968
PYR_ONEERN (400)	5322	99	2,128,800
PYR_ONEMIS (48)	164	6	7,872
PYR_ONESPL (100)	180	18	18,000
PYR_YTDSEG (352)	112K	82	40,370,176

The File Name is in the format "OSC.PXA.PRODJOBS.PR085-3.DYYYYMM". The file size ranges with the February 1999 file size at 105 MB and the November 2006 file size at 130 MB. Central Payroll also outputs a file from each payroll cycle, which is referred to as the Current Earning file. Multiple payroll cycles occur during the month. At the end of each month the files are appended to create a monthly current earning file. There are monthly current earning files on tape beginning February 1999. These files are used primarily for research.

3.6. Other Data Repositories

There are a number of other systems, applications, or databases that source their data from PMIS, Central Payroll, and DOT Payroll. Even though these satellite systems are not the system of record they do provide reporting or legacy data access to a degree. For this reason, they were analyzed to determine if any of the underlying databases were candidates for data migration.

3.6.1. Systemware

Systemware will not be retired as part of the BEACON deployment because it is used for other applications within the State. Any report with historical PMIS or Payroll data will continue to be available in its current format subject to current retention policies. No new reports will be generated in Systemware for HR or Payroll after BEACON goes live. Central to the BEACON reporting strategy is the use of SAP BI for analytical reporting and SAP ERP for real-time operational reporting needs not met by SAP BI.

3.6.2. PMIS Director's Center (Web Reporting)

PMIS/HR uses the snapshot tape files referenced above to append historical reporting data into DB2 tables that are accessed via the web by division directors and HR personnel for historical reporting. This data is accessed via the OSP (Office of State Personnel) web site via the Director's Center link: https://ncosp.osp.state.nc.us:8080/HRLoginAll/HRLogin.html

The tables provide summaries of position and employee data including by department, division, schematic, age, education, gender, grade, and salary. The data is historical back to 1980 or 1976 as indicated in the following table.



File/Table	Rows	Columns	Size (bytes)	Years
PMX_HT_TOTALS_TAB (297)	1528K	72	464707584	30
PMX_ST_AGE_TAB (297)	30913	73	9181161	26
PMX_ST_AGRSVC_TAB (577)	30913	143	17836801	26
PMX_ST_EDUC_TAB (46)	159K	11	7489536	26
PMX_ST_GRADE_TAB (43)	212K	9	9334789	26
PMX_ST_SALARY_TAB (525)	30913	130	16229325	26

Current reporting needs met by the PMIS web reporting application will need to be addressed by SAP BI.

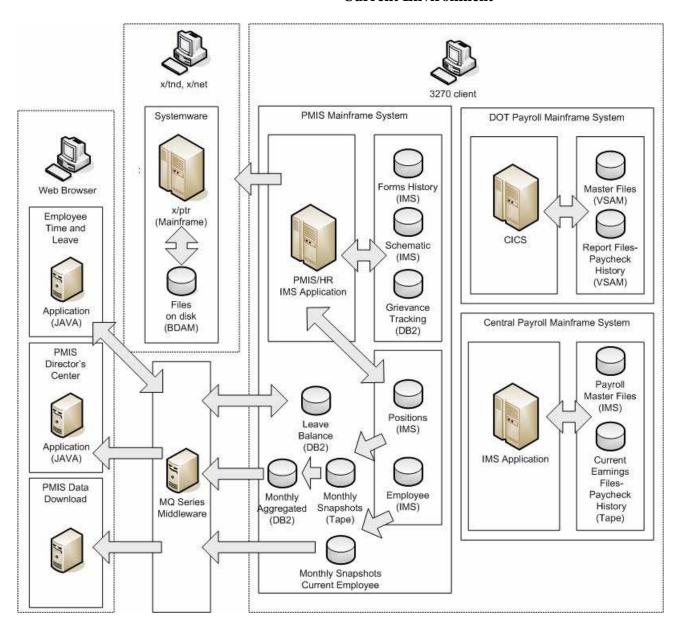
3.6.3. PMIS Data Download

Snapshot information from PMIS can be downloaded in predetermined file format. Going forward this requirement will need to be met with SAP BI. Representatives of agencies that use this functionality who were interviewed did not see a need to migrate any of these historical files because the agencies store the downloaded files and derived reports on their own PCs for future use.

The graphic below illustrates the current environment.



Current Environment





4. HISTORICAL DATA REQUIREMENTS

Current legacy HR and Payroll systems contain large amounts of detailed and summarized historical information. After meeting with various agencies it appears that the most used historical data are PMIS Employee Action History, PMIS Position History, and Payroll Earnings History. There are expectations that historical information on these areas will be available in the new system

4.1. Employee Action History

Currently, any authorized user can log into PMIS and access employee history going back 30 years. Requests for employee history come from internal and external sources. Agencies have various uses for this history such as for answering budgetary questions and researching employee claims and employment status.

4.2. Position History

Similar to employee action history, users can obtain complete position history online going back 30 years. This data is used for budget development, analysis, trending, and management reporting and to answer various queries.

4.3. Payroll Earnings History

To resolve back pay claims, leave, and other retroactive adjustments, the State maintains payroll earnings and master data files. As of December 21, 2006, there currently are 10 years of DOT Payroll data and 7 years of Central Payroll data. This history needs to be available for future issue resolution.



5. ANALYSIS OF CURRENT STRATEGIES

In developing this BEACON Data Migration Strategy, the following BEACON Strategy Deliverables were analyzed for any dependencies or assumptions that needed to be taken into consideration

5.1. BEACON Conversion Strategy

The BEACON Conversion Strategy addresses the approach and technique for data conversion into the SAP ERP system. Data migration for historical data is beyond the scope of the BEACON Conversion Strategy because SAP ERP will not be the primary reporting or inquiry system for historical data. Additional details are provided in the following BEACON deliverable:

BEACON HR/Payroll Implementation Project Conversion Strategy

5.2. BEACON Reporting Strategy

According to BEACON Reporting Strategy Version 1.0, April 14, 2006, the current project scope is to load into ERP 2005 only that data necessary to provide a seamless generation of W2 information for the calendar year in which the system goes live. In general, because of the enhanced reporting features, functionality, and performance the SAP BI will be the intended reporting solution, technology, and system. In cases where specific transactional details are not available within SAP BI or the timeliness of the data dictates that the report must be executed in a real-time manner, an ERP 2005 solution (standard ERP 2005 transaction/report or custom code) will be used to satisfy the reporting requirement. Additional details are provided in the following BEACON deliverable:

BEACON HR/Payroll Implementation Project Reporting Strategy

5.3. BEACON Security Strategy

The BEACON HR/Payroll Implementation Project SAP Security Strategy describes the approach for the development of SAP Application security including ERP and BI. Any legacy data that is not loaded into the SAP environment will need provisions to ensure data security. Additional details are provided in the following BEACON deliverable:

BEACON HR/Payroll Implementation Project SAP Security Strategy

5.4. BEACON Planned Operational and Security Environment

The BEACON program will use SAP software (ERP 2005; NetWeaver 2004s, including BI and Portal; and Solution Manager 4.0) to support HR and Payroll. The server hardware selected to be installed and hosted by ITS (North Carolina Office of Information Technology Services) include Sun V490 and E2900 servers. The database platform chosen is Oracle with EMC SAN storage devices.

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For securing the environment, BEACON will be using the ITS Enterprise Secure Access Points (ESAP) approach. Additional details are provided in the following BEACON deliverables:

<u>BEACON HR/Payroll Implementation Project System Landscape Strategy</u>

<u>BEACON HR/Payroll Implementation Project SAP Development Environments Ready</u>

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STRATEGY OPTIONS

There are a number of important factors to weigh in the development of the BEACON Data Migration Strategy including the amount of historical information in the legacy environment; the business requirements for inquiry and reporting of this historical information; and previous decisions made regarding conversions, reporting, and security strategies. Another key issue is access to and reporting of the historical data and integration of the historical data from the legacy systems with the data created in the post-go-live BEACON SAP environment. Four strategy options along with the advantages, disadvantages, and the impacts of each are presented in the paragraphs that follow.

6.1. Option 1: Status Quo

Do not convert historical transaction or snapshot data and maintain PMIS, Central Payroll, and DOT Payroll historical files. This alternative is used as a baseline for evaluation and comparison purposes.

Advantages:

- No data conversion anomalies will occur and all data prior to legacy cutover will remain intact.
- Users will have familiarity with historical data in current formats.
- There will be no additional resource needs.

Disadvantages:

- User familiarity with historical data and associated systems will become a problem as time goes by and users who have familiarity with historical data move on.
- Requires continued maintenance and operation of PMIS, Central Payroll, and DOT Payroll.
- Possible conflicts in consistency of information across SAP BI, and PMIS, Central Payroll, and DOT Payroll may require additional resources to resolve.
- Complete employee history would require a merge of data from SAP BI, PMIS, Central Payroll, and DOT Payroll.

Impact:

This alternative is offered as a baseline description. If the status quo is maintained, the impact on legacy systems would be minimal in the near term. However, over time the impacts will be significant. Keeping legacy systems operational to allow lookup of historical data defeats the purpose and cost saving benefits of implementing SAP.

6.2. Option 2: Copy all online data to a repository but do not convert

In this option, all online data is extracted and copied on to a legacy data repository. The data repository can be any commercially available relational database management system.

Advantages:

- No data conversion anomalies will occur for transactional data, and attributes will remain intact as defined by legacy systems.
- Making a copy or snapshot of all online data allows for the retirement of the legacy systems.
- Users will have familiarity with historical data.

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• There will be no impact on legacy systems requiring historical transaction data.

Disadvantages:

- User familiarity with historical data and associated systems will become a problem as time goes by and users familiar with legacy data move on.
- Historical data will reside in more than one location, requiring a merge of the data.
- Reporting in SAP BI will not have any historical data before the BEACON go-live date.
- Possible conflicts in consistency of information across legacy and BI or the data repository may require additional resources to resolve.

Impact:

The overall impact of copying the online data to a repository is that historical data will be available for research, but not in a reporting format consistent with the new SAP BI system. The legacy systems can be retired. However:

- Additional training may be required for State personnel, depending on the selected data repository.
- An inventory and data dictionary of unconverted historical data repositories and archives would be needed.

6.3. Option 3: Convert all online historical data to SAP BI

Convert all historical data available in the legacy system into BI and keep archived data in the current format.

Advantages:

- Converting historical data into BI allows for historical reporting using BI on day one of BEACON go-live.
- Converting historical data into BI allows for transparent reporting of information sourced from the legacy systems and SAP.
- Converting historical data into BI provides comprehensive reporting on employee action history and position history.
- Converting historical data into BI provides one system of record for agencies to access historical and current information.
- Use of BI as the reporting infrastructure for SAP and legacy data allows use of the BI security infrastructure to restrict access to sensitive HR data.
- Making a copy or snapshot of all online data allows for the retirement of the legacy systems.

Disadvantages:

- This approach may not be feasible in the current BEACON schedule.
- Resource contention will put BEACON at great risk for go-live.
- Significant scope change to BI will require hardware resizing.
- Additional resources needed on BI Team.



- There is risk of data inconsistencies due to disparity of historical data.
- There is a cost involved in maintaining archived data in its current format.
- There is a cost involved in maintaining the data repository for copied data.
- Due to the two reporting environments, an additional data access procedure will need to be developed.

Impact:

• Scope change for BI reporting will greatly impact BEACON BI, conversion, and functional teams and subject matter experts (SMEs).

6.4. Option 4: Copy all online data to a repository and convert to SAP BI selected historical data identified as required for reporting

In this option, all online data is extracted and copied on to a legacy data repository. The data repository can be any commercially available relational database management system. Selected historical data identified as required for reporting is extracted and loaded into SAP BI for combined reporting.

Advantages:

- Payroll reports in Systemware are still accessible because Systemware will remain to support other systems.
- Converting historical data into BI allows for historical reporting using BI on day one of BEACON go-live.
- Converting historical data into BI allows for transparent reporting of information sourced from the legacy systems and SAP.
- Converting historical data into BI provides comprehensive reporting on employee actions history and position history.
- Converting critical historical data into BI provides one system of record for agencies for frequently accessed historical and current information.
- Use of BI as the reporting infrastructure for SAP and legacy data allows use of the BI security infrastructure to restrict access to sensitive HR data.
- Making a copy or snapshot of all online data allows for the retirement of the legacy systems.
- Because a smaller set of data is needed for conversion into SAP BI, the data quality is more manageable.

Disadvantages:

- There is risk of data inconsistencies due to disparity of historical data.
- There is a cost involved in maintaining archived data in its current format.
- There is a cost involved in maintaining the data repository for copied data.

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- There will not be one system of record for historical reporting as some of the data will be in SAP BI and all in the legacy data repository.
- Due to the two reporting environments, an additional data access procedure will need to be developed.

Impact:

- Additional training may be required for State personnel depending on the selected data repository.
- Scope change for BI reporting will impact BEACON BI, conversion, and functional teams and SMEs.
- An inventory and data dictionary of unconverted historical data repositories and archives is needed.

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7. RECOMMENDED SOLUTIONS

After analysis of the legacy and to-be environments and requirements for historical data, Option 4 is recommended as the BEACON Data Migration Strategy:

Option 4: Copy online data to a repository, convert to SAP BI selected historical data that has been identified as required for reporting, and maintain archived data in current format and media

Making a copy or snapshot of all online data allows for the retirement of the legacy systems. It also allows controlled read access to historical data for research purposes if that particular dataset was not converted into SAP BI.

The State should choose a modern relational database for the historical data repository. Ideally, the State should already own a license for this and have resources with experience in operating and maintaining this tool.

Converting selected historical data into BI allows for historical reporting using BI on day one of BEACON go-live. In particular, the BEACON user community is expecting to see employee action history and position history on day one. But by controlling the scope of the conversion based on identified reporting needs, risk to the overall BEACON program is greatly reduced. As data needed for conversion is captured in the repository, it can be converted into the SAP BI format in the future should a need be identified.

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8. ADDITIONAL CONSIDERATIONS

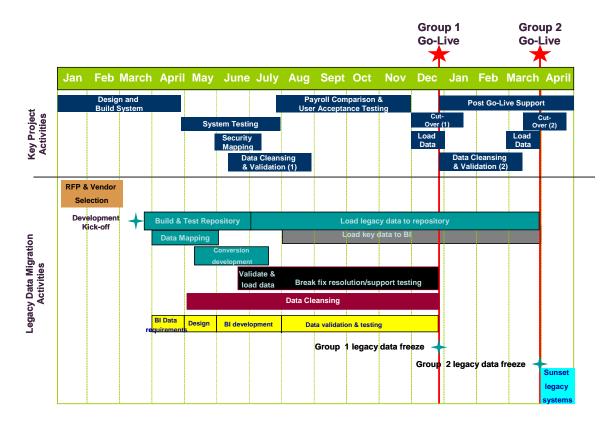
8.1. Resources

There are a number of resources that will be required to implement the recommendations of the BEACON Data Migration Strategy.

- Even with the selection of a tool familiar to the State, resources will still be required to build, maintain, and administer the legacy data repository. The expertise needed will be largely dependent on the platform and tool selected.
- Resources will also be required to extract the historical information from the legacy systems and load into the legacy data repository.
- There will also need to be an increase in time commitment from the legacy SMEs supporting the BEACON program.
- Additional resources will need to be added to the BEACON BI Team for the additional BI scope.

8.2. Timing

The following graphic shows the proposed high-level timeline for data migration activities.





Development should kick off in mid-March for an approximately 9-month effort. The timeline supports the two go-live dates for BEACON. All data must be loaded into the legacy data repository and SAP BI up to the January go-live date. A second data load to the legacy data repository and SAP BI must occur between January and April 2008 to support second go-live in April. The plan allows for multiple cycles of data conversion, cleansing, and validation.

8.3. Reporting

The process to access historical data once it has been extracted and loaded to the central repository needs to be defined in time for BEACON go-live. To ensure data integrity, consistency of results, and controlled access to sensitive HR information, it is recommended that one group be responsible for managing the process. The user community should have one point of contact for all data inquiry and reporting needs. Historical HR and payroll information can be another service provided through the Shared Service Center as part of business process support.

8.4. Currently archived data

The data migration strategy addresses historical online data in PMIS, Central Payroll, and DOT Payroll. There is data that has been archived on various media including files on tape and microfiche. Typically, data is archived when it is not critical for day-to-day business but must be retained for research purposes. There may not be much value added to the BEACON project to convert already archived data into the online system only to archive it again in a new media. However, it is recommended that an inventory and data dictionary of this data exist while State legacy resources are available to complete this task. A determination needs to be made of the current access methods to this archived data and the impact of retiring PMIS, Central Payroll, and DOT Payroll applications. If the retirement of these systems will mean a loss of access to the archives, alternate access methods need to be implemented.



9. APPENDIX

References

- 21st Century Project Reporting Plan—State of California
- 21st Century Project Design Decision Document—State of California
- BEACON BI Report Evaluation
- BEACON Conversion Strategy
- BEACON Reporting Strategy
- Commonwealth of Pennsylvania
- State of North Carolina, HR/Payroll Project Legacy System Questionnaires—PMIS, Central Payroll, and DOT Payroll
- DTE Energy—Data Conversion Plan
- NASA e-Payroll Project Historical Data Conversion

Meetings were held with the following agencies, departments, and/or individuals:

- BEACON HR/Payroll Project Business Intelligence Team Members
- BEACON HR/Payroll Project Conversion Team Members
- BEACON HR/Payroll Functional Team Members
- Representatives from the Fiscal Research Division
- Representatives from the State Employees Retirement System
- Representatives from the Office of State Controller
- Representatives from the Office of State Auditor
- Representatives from the Office of State Personnel
- Representatives from the Office of State Budget and Management
- State of California—BearingPoint Project Team Members



10. REFERENCES

Referenced documentation is located in Project Office, the repository for finalized project documentation.